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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,045	01/16/2004	Chin-Wen Chou	2450-0262P	6140
2292	7590	07/25/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			MAY, ROBERT J	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	
			2875	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/758,045

Applicant(s)

CHOU ET AL.

Examiner

Robert May

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the LED or LEDs as claimed in Claim 3 must be shown because the office does not understand how the configuration as disclosed by applicant comprises the LED in the tubular shaped light emitting element. The applicant is reminded that no new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: the office considers the portion of Claim 1 reciting "...a plurality of light-emitting elements having two electrodes disposed at two ends of the light-emitting element and..." to be unclear. It is suggested to reword in the following way: ...a plurality of elements wherein each of the elements has two electrodes disposed at two ends thereof.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The office fails to understand the invention when the light emitting element is an LED as claimed in Claim 3 which limits the light emitting element of Claim 1 to an LED which further claims a uniform light section disposed on the tube body of the LED. The office does not comprehend what the tube body is of an LED

and what the uniform light section is of the LED even when read in light of the specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1-2, & 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hucks (US Pat. 5,755,507). The applicant has disclosed prior art in Figure 1, which comprises all of the elements as claimed in Claim 1 except for a configuration wherein the electrodes are interlaced with respect to each other. However, Hucks discloses in Figures 2, 2A, 6A and 6B a device for interconnecting lighting fixtures wherein the lighting elements including the electrodes are in an overlapping, interlaced configuration which enables the light to appear continuous (Col. 1, Lines 20-27). Therefore, it would be obvious to one of ordinary skill in the art to modify the prior art as disclosed by the

applicant by overlapping the light emitting elements and electrodes as disclosed by Hucks in order to provide light that appears continuous.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hucks as applied to Claims 1-2, & 4 and further in view of Bahadur (US Pat. 6,639,349). Hucks does not teach or suggest a light emitting element being an LED having a uniform light section being disposed on a tube body. However, Bahadur discloses in Figures 7-8 a plurality of light sources disposed on tubular fluorescent lights, which could be light emitting diode array (Col. 3, Lines 49-51). The LED array 26 allows for sufficient luminosity to serve as a secondary light means for an LCD backlight during nighttime viewing conditions (Col. 3, Lines 2-5). Therefore, it would be obvious to one of ordinary skill to modify the teachings of Hucks in light of the applicant's admission of prior art to add an LED array to the tubular section of the uniform light section to provide for a secondary lighting means that is viewable at nighttime viewing conditions.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hucks as applied to claims 1-2 & 4 above, and further in view of Ogawa (US Pat. 4,766,524). While the applicants admission of prior art in view of Hucks discloses all of the claimed elements of 1-2, 4 except for a U-shaped lighting element. However, Ogawa discloses a back light device for uniformly illuminating a liquid crystal display plate for reducing the luminance unevenness on the display plate (Col. 1, Lines 50-52). Therefore, it would be obvious to one of ordinary skill to modify the applicant's admission with prior art in view

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of Hucks with the U-shaped fluorescent lamp of Ogawa in order to reduce the luminance unevenness of the display.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hucks as applied to claims 1-2 & 4 above, and further in view of Sato (JP 02272485 A). While the applicants admission of prior art in view of Hucks discloses all of the claimed elements of 1-2, 4 except for a W-shaped lighting element. However, Sato discloses a Plane Light source device with a W-shaped fluorescent tube for illuminating a wide area with low energy consumption and having low luminance dispersion. Therefore, it would be obvious to one of ordinary skill to modify the applicant's admission of prior art with the W-shaped fluorescent tube in order to illuminate a wide area and have a low energy consumption and luminance dispersion.


### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee (US Pat 5,479,328) and Grave (US Pat. 6,039,451) disclose a backlight with a serpentine tubular fluorescent lamp for an LCD. Barton (US Pat. 6,431,726) discloses an adjustable side sliding fluorescent lamp fixture with an overlapping configuration. Lee (US Pat. 6,857,759) discloses a backlight assembly for an LCD with has a plurality of lamps which extend from a central portion of a back panel. Adachi (US Pat. 6,709,122) discloses a plane like lighting unit with linear light emitting diodes that are bar shaped.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert May whose telephone number is (571) 272-5919. The examiner can normally be reached between 9 am– 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval PAIR system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ALAN CARIASO  
PRIMARY EXAMINER